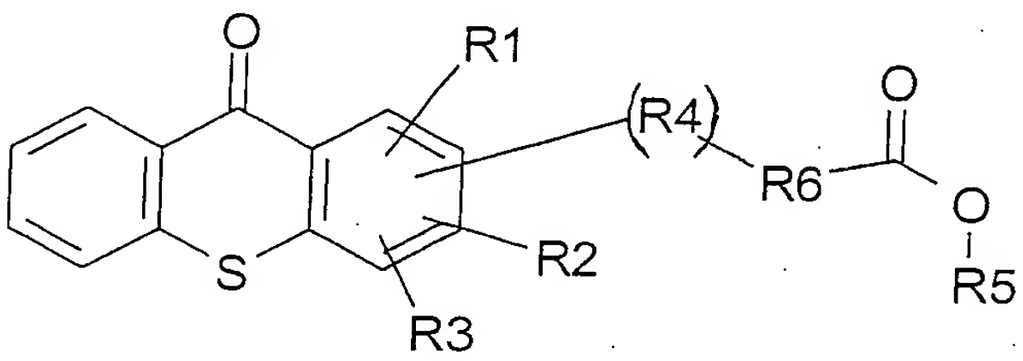
CLAIMS

1. A process for the production of thioxanthone derivatives of the general formula (I) given below:



(I)

where:

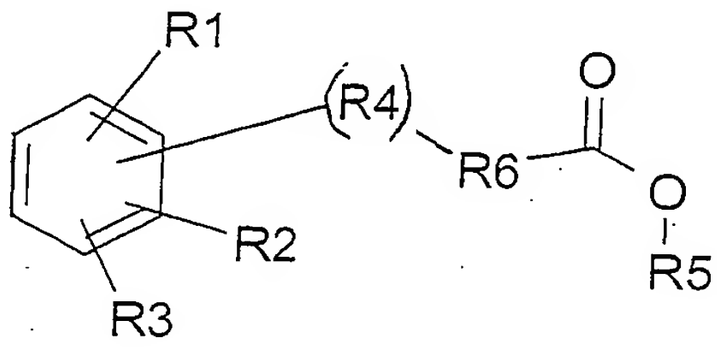
R_1, R_2 and R_2 is hydrogen, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, halogen, hydroxy or C_1-C_{10} dialkylamino; R_1, R_2 and R_3 being the same or different;

R_4 is oxygen, sulphur or absent;

R_5 is hydrogen, C_1-C_{10} alkyl or aryl; and

R_6 is a straight or branched alkyl chain having 0 to 10 carbon atoms;

the one-step process comprising reacting a compound of the general formula (II) below with mercaptobenzoic acid or dithiobisbenzoic acid in the presence of sulphuric acid:



(II)

2. A process as claimed in claim 1, wherein R_6 is $-(CH_2)_n-$ in being 0 to 10.

3. A process as claimed in claim 1, wherein the compound of formula (II) is phenoxyacetic acid where R_1, R_2, R_3 and R_5 are each hydrogen, R_4 is oxygen and n is 1.

4. A process as claimed in claim 1, wherein R_6 is $-CH(CH_3)-$.

5. A process as claimed in any one of claims 1 to 4, wherein the sulphuric acid is used in amounts 1 part to 20 parts by weight of acid to 1 part by weight of dithiobisbenzoic acid or mercaptobenzoic acid.

6. A process as claimed in claim 1, wherein the sulphuric acid has a concentration of equal to or greater than 90%.

7. A process as claimed in claim 1, wherein the molar ratios of dithiobisbenzoic acid or mercaptobenzoic acid to a compound of formula (II) are 1:1 to 1:5.

8. A process as claimed in claim 1 further comprising stirring the reactants to aid completion of the reaction.

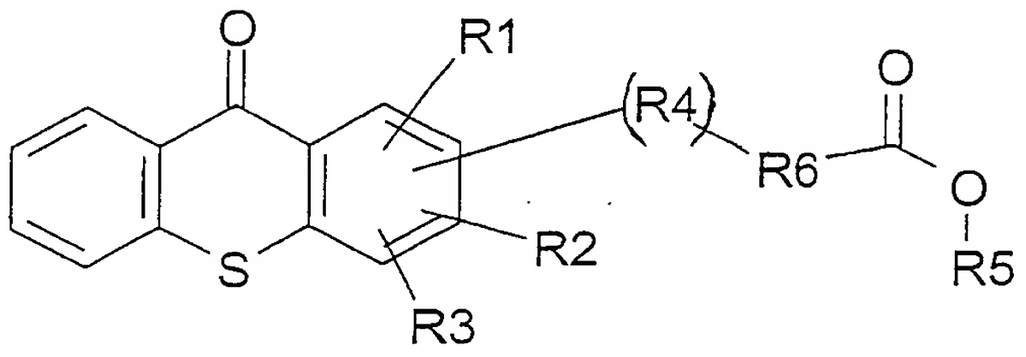
9. A process as claimed in claim 1, wherein the temperature of the reaction is kept at 0°C to 30°C during addition of the reactants.

10. A process as claimed in claim 9, wherein the temperature is increased to 30°C to 90°C following addition of the reactants.

11. A process as claimed in claim 1 further comprising quenching the reactant mixture with excess water and filtering the solid product.

12. A process as claimed in claim 9, wherein water is added to dilute the acid strength to 20 – 50%.

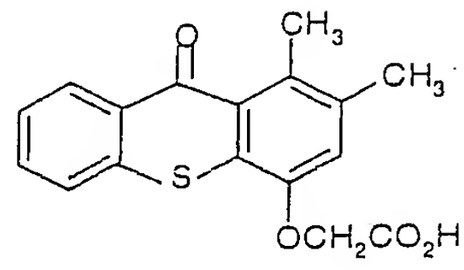
13. A substituted thioxanthone of the general formula (I) below:



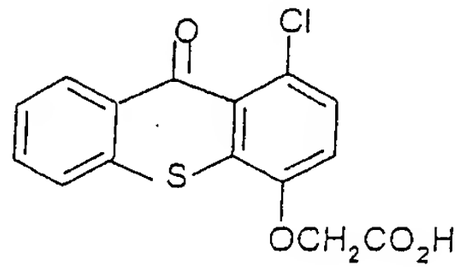
(I)

prepared according to the process of claim 1.

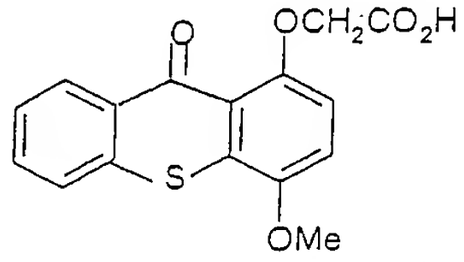
14. 1,2-Dimethyl-4-carboxymethoxythioxanthone,



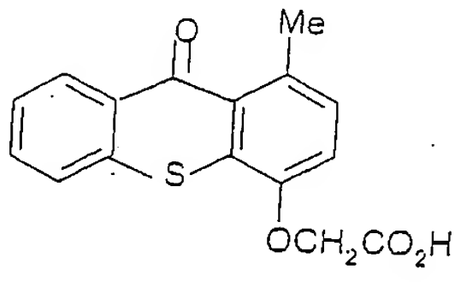
15. 1-Chloro-4-carboxymethoxythioxanthone,



16. 1-Carboxymethoxy-4-methoxythioxanthone,



17. 1-Methyl-4-carboxymethoxythioxanthone,



18. 2-(2-Methyl)-carboxymethoxythioxanthone,